

ABSTRACT OF THE DISCLOSURE

A method and apparatus for maintaining the cells of a fuel cell stack are disclosed. The apparatus includes a fuel cell maintenance device including means for imposing a low impedance across at least one cell of a fuel cell stack, *e.g.*, a switch, and a pulse generator.

5 The pulse generator is capable of pulsing a cathode of the at least one cell of through the low impedance imposing means, *e.g.*, when the switch is closed. The method transparently maintains the cells of a fuel cell stack, and includes sequentially pulsing the cathodes of a plurality of cells in a fuel cell stack, and maintaining a consistent number of the cells providing power to a load of the fuel cell stack while sequentially pulsing the cathodes of the

10 cell.